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ABSTRACT

A 1983 committee report is presented of the World Health Organization Expert Committee on the Education and Training of Nurse Teachers and Managers with Special Regard to Primary Health Care. After discussing the changing context of health care and trends in primary health care, changes required in education and training in health systems based on the primary health care approach are addressed, including the role of nursing personnel. The current preparation of nurse teachers and managers in post-basic education programs is examined, with attention to facilities and teaching/learning resources; students, teachers, and administrators; and curriculum. In addition to identifying competencies and objectives of post-basic education, the implementation and evaluation of programs are considered. Areas for change and factors influencing the process of change are discussed, including health personnel policy, attitudes and values, leadership, teachers and students in post-basic schools, the location of educational programs, resources and administrative support, research, and nurses as agents of change. Brief case studies for Senegal and Thailand are included. (SW)

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Geneva, 3–7 October 1983

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EDUCATION AND TRAINING OF NURSE TEACHERS AND MANAGERS WITH SPECIAL REGARD TO PRIMARY HEALTH CARE

Report of a WHO Expert Committee

A WHO Expert Committee on the Education and Training of Nurse Teachers and Managers with Special Regard to Primary Health Care met in Geneva from 3 to 7 October 1983. The meeting was opened by Dr T. Fülöp, Director, Division of Health Manpower Development, who welcomed the participants on behalf of the Director-General.

Dr Fülöp referred to the last WHO Expert Committee dealing with nursing, which had met in 1974, and to some of the momentous changes that had taken place in concepts of health care, and in approaches to health care, since that time. He said that these changes had been characterized by the unanimous adoption by the Member States of WHO of the resolution on "Health for all by the year 2000" and by the Declaration of Alma-Ata advocating primary health care as the key to attaining this goal. He emphasized that the goal could not be reached without the participation of nursing personnel.

Dr Fülöp spoke of some of the implications for nursing personnel of this new approach to health care, in particular of the need to reorient educational programmes to make them relevant to the health needs of populations and to the requirements of health systems based on the primary health care approach and geared to the concept of health for all by the year 2000.

He charged the Committee to recommend practical and viable strategies and approaches for the reorientation of post-basic nursing education, and to provide guidance on how WHO could hasten the changes required.

1. THE CHANGING CONTEXT OF HEALTH CARE

1.1 Primary health care as the key to health for all

The Committee considered the context in which nursing manpower had developed since 1974, when a WHO Expert Committee on Community Health Nursing (*1*) had been convened to recommend ways in which nursing could make a significant impact on the health problems then prevailing in the world. That Committee's recommendations had focused on: the development of community health nursing services that were responsive to the needs of the community and that encompassed primary health care coverage for all; the development of basic and post-basic nursing educational programmes that made community health the central objective; and the development of health manpower, including nursing manpower, within overall national development plans, which should reflect a rational distribution and utilization of personnel to provide needed community health coverage and essential support systems. The 1974 Committee had also identified changes required in the conceptual framework of health care, in nursing education, and in the provision of nursing services; and it had emphasized the need for a change in attitudes.

Indeed, if it had proved possible to implement more widely the findings of the 1974 Committee, nursing personnel would have been in the forefront of the primary health care movement. Unfortunately, circumstances prevailing at the time did not provide the climate required for the ready acceptance of the changes proposed.

Some of the significant developments that have taken place in the intervening years are noted below.

In 1977, the Thirtieth World Health Assembly adopted a resolution (WHA 30.43) proclaiming that "the main social target of governments and WHO in the coming decades should be the attainment by all the citizens of the world by the year 2000 of a level of health that will permit them to lead a socially and economically productive life" (*2*, p. 1). Adoption of this universal target implies that there is a minimum level of health for all people, a baseline below which no people in any country should find themselves, and this implies that the level of health of *all* people should at least be such that they are capable of working productively and participating actively in the social life of the community in which they live.

"Health for all" is not a single finite target but rather a process leading to the progressive improvement in the health of all people. The concept will be interpreted and adapted differently by each country in the light of its social, economic, and even political characteristics, and with reference also to the health status and morbidity patterns of its population and the state of development of its health system.

In 1978, the Declaration of Alma-Ata (*3*, p. 3) identified primary health care as the key to attaining the target of health for all by the year 2000, which it viewed as part of development in the spirit of social justice. It defined primary health care as "essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination". The Declaration went on to state that primary health care "forms an integral part both of the country's health system, of which it is the central function and main focus, and of the overall social and economic development of the community. It is the first level of contact of individuals, the family, and the community with the national health system, bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process." (*3*, pp. 3 and 4).

The Declaration defined eight essential elements of primary health care as follows: "education concerning prevailing health problems and the methods of preventing and controlling them; promotion of food supply and proper nutrition; an adequate supply of safe water and basic sanitation; maternal and child health care, including family planning; immunization against the major infectious diseases; prevention and control of locally endemic diseases; appropriate treatment of common diseases and injuries; and provision of essential drugs" (*3*, p. 4).

The Committee recognized that five principles are embodied in the definition of primary health care and these are: equitable distribution, community involvement, appropriate technology, focus on prevention, and a multisectoral approach. This concept would require a different approach to health development from that adopted previously. It implies a more even distribution of resources for health, both within countries and internationally, and places emphasis on community involvement. It demands a reorientation of

the entire health care delivery system so that it "evolves in accordance with the direction and content of new policies, strategies and plans of action" so as to ensure that "primary health care and its support do not become a parallel system that is a 'poor relation' of the existing system." (*4*, p. 28). The functions, staffing, planning, design, equipment, organization, and management of services at all levels need to be reviewed to prepare them for their wider role in support of primary health care (*4*, p. 27). Primary health care development is multisectoral in nature, thus many sectors, in addition to the health sector, are instrumental in promoting health, and government policies and public pressure can play a major part in achieving the multisectoral approach required. Examples quoted were: the provision of safe drinking-water and adequate sanitation; an adequate supply of the right kind of food; and adequate housing.

It was realized that, above all, the acceptance of primary health care as the central function and main focus of health care provision involved a major revision of attitudes towards the meaning of health; a social reorientation and a radical rethinking of ways of delivering health care and of promoting health are essential. Traditional health systems will need to be reorganized. Fundamental to the changes required is a reorientation of training programmes for health service personnel geared to preparing staff to work as effective members of primary health care teams.

The Committee noted that in 1981 the Thirty-fourth World Health Assembly adopted resolution WHA34.36 on a Global Strategy for health for all by the year 2000 (*2*, p. 5), hereafter referred to as "the Strategy". Its main thrust is the development of health system infrastructures in the individual countries for the delivery of countrywide programmes that reach the whole population and are based on the primary health care approach.

The policies on which the Strategy is founded are as follows: preservation of the fundamental right to health; an equitable distribution of health resources; community involvement; political commitment of the State; national self-reliance; intersectoral cooperation; and technical and economic cooperation among countries. The Strategy involves specifying measures to be taken by individuals and families in their homes, by communities, by the health service at the primary and supporting levels, and by other sectors. It also involves selecting technology that is appropriate for the country concerned in that it is scientifically sound, adaptable to

various local circumstances, acceptable to those for whom it is used and to those who use it, and maintainable with resources that the country can afford. Crucial to the Strategy is the ensuring of social control of the health infrastructure and technology through a high degree of community involvement.

1.2 Trends in primary health care development towards health for all

The Committee reviewed some of the factors relevant to a reorientation of health services towards the primary health care approach and identified trends in order to provide further background for its specific consideration of the changes required in the preparation of nurse teachers and managers.

Some of the factors and trends that emerged are summarized below.

Health for all strategies are being implemented in different parts of the world in situations that are subject to constant change resulting from, for example, past or present conflicts, natural disasters, economic crises, and political changes. Sociocultural constraints include poverty, illiteracy, ethnic and cultural differences, rapid urbanization, and changing life-styles. In many countries, a majority of the population is still disadvantaged in social, physical, and psychological terms. Often, basic priority needs for food and land are not yet met. Unemployment and underemployment are also critical factors influencing health development.

The scattered distribution of the population is another factor that complicates the delivery and development of health services, and often poor communications systems add to the difficulties. Health services frequently reflect political dictates rather than response to need; urban-based curative care continues to absorb a disproportionate amount of health budgets. While it may be unlikely that a substantial shift in health resources within countries will be possible in the near future, an immediate need is that increases in available resources should be predominantly directed towards primary health care development.

It is apparent that in some countries the primary health care approach to health for all by the year 2000 is not well understood by the politicians and population at large, or even by health workers,

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and the benefits of primary health care may be seen to result from services that are institution-centred and mainly curative in nature.

The health infrastructure for primary health care development differs widely between countries. In some instances, the national infrastructures are wholly supportive of primary health care; in others, appropriate infrastructures have been established only in pilot areas, or the development is limited to mobile services. Some countries have detailed plans for the development and strengthening of existing infrastructures through the provision of networks of facilities to include, for example, dispensaries, health centres, and purpose-designed hospitals. Elsewhere, peripheral-level infrastructures are being upgraded. Many countries experience weakness in referral systems; also, supplies of essential drugs and equipment are often inadequate and there is a lack of maintenance facilities.

In some countries, initiatives at the local level include the introduction of new categories of manpower, such as community health and development workers, the setting up of organizations in the form of development committees, and the introduction of local insurance schemes. However, the effectiveness of such innovations is largely dependent on the prevailing political, social, and administrative structures, which need to be supportive of local endeavours.

In many countries, nursing and midwifery personnel continue to be the main providers of primary health care within the respective health systems, despite the traditional institution-oriented characteristics of nursing structures and nursing training which are still common, although, in some countries, nurse training curricula have been revised to reflect the nurses' actual or potential role in primary health care. Nursing roles include assessing the health status of individuals and communities; mobilizing community involvement in primary health care; providing integrated health care, including the treatment of emergencies and making referrals; maintaining epidemiological surveillance; training and supervising health workers; collaborating with other development sectors; and monitoring progress in primary health care. Some nurses receive training to become community health practitioners and to provide health services at the periphery.

National nurses associations in some countries have set up committees to develop and monitor strategies of nursing in support of primary health care.

2. NURSING MANPOWER DEVELOPMENT IN HEALTH SYSTEMS BASED ON THE PRIMARY HEALTH CARE APPROACH

2.1 Requirements of changing health systems

The Committee was in no doubt that a reorientation of health systems towards health for all by the year 2000 through primary health care involved a reorganization that reflected a changed outlook towards the promotion of health and the delivery of health care. The production of health manpower equipped to operate effectively within the new system was basic to its successful achievement. This has far-reaching implications for training institutions and for training programmes. Training curricula will need to be developed that are community- and competency-oriented, based on a problem-solving approach, socially and technically appropriate, and learner centred.

The Committee recognized that, in determining health care systems, there was no blueprint for an ideal system that could have universal application, and that a great deal of work was required to develop health systems appropriate to the different circumstances of individual countries.

However, the Committee noted that in most countries health services operated at three levels, which may be described as peripheral, intermediate, and national, and it believed that, as each country designed the health system most appropriate to its geographical, political, and social structure, each of these three levels was capable of expansion to suit its national needs. The Committee also believed that there were certain general principles that were applicable to any health system based on the primary health care approach; in particular, the system should encompass the entire population on a basis of equality and responsibility and it should include components of other sectors whose interrelated actions contribute to health.

At the peripheral level, or first point of contact between individuals in the community and the health system, at least all the essential elements of primary health care outlined in the Declaration of Alma-Ata should be available on a continuing basis; and all other levels within the health system should support the first-contact level.

At the intermediate level, which deals with more complex health problems and provides more skilled and specialized care, health

logistic and referral support, more highly trained staff are required. The functions of the staff include continuing education, supervision and support for health service workers, and guidance and support to community health workers and communities on the practical aspects of primary health care. Above intermediate level, the system should provide planning and management expertise, teaching for specialist staff, highly specialized care, the expertise of such institutions as central laboratories, and central logistic and financial support.

The Committee examined what was involved in developing such health systems and came to the following conclusions.

Countries will need to define the specific action to be taken by the different parts of the health sector to produce plans for coordinated action; also, the action to be taken by other sectors will have to be identified and the participation of the relevant authorities sought. Ways will have to be devised for involving communities in decision-making for health and for sharing responsibility for the development of self-care and self-reliance. Central planning will also need to include the identification of mechanisms to enable communities of different types and sizes to participate in planning their own health care activities. A supportive referral system will be required that pays particular attention to the realities and needs of the first level of referral. An effective countrywide system will be necessary to ensure sufficient logistic support in respect of material resources, such as essential drugs and supplies.

Health manpower will need to be planned, trained, and deployed in response to specific community-level needs and problems and in accordance with an integrated plan for health development, with primary health care as its unifying theme. Existing health service infrastructures will need to be geared to the changed health system and new facilities planned, constructed, and equipped to meet its requirements. Health technology will need to be scientifically sound, adaptable to differing local circumstances, acceptable to both users and recipients, and maintainable within the resources that the country can afford.

2.2 Integrated development of health services and health manpower

The Committee noted that, in recent years, WHO had made a special effort to encourage countries to adopt and apply the concept of integrated health services and manpower development (HSMD)

in accordance with resolution WHA29.72 (*2*, p. 58). This concept involves the functional integration of the main components of health manpower development (planning, production, and management) into a single process closely linked to, or integrated with, the development of health services. The aim of the HSMD approach is to ensure that the delivery of health services in a country is as effective and efficient as possible and is achieved with the minimum input of the most appropriate financial, human, and material resources.

The application of HSMD principles and practices requires that both the quality and the quantity of health manpower are planned in response to the specific needs of the health system and to the health needs and demands of the population; this approach is at variance with current policy and practice in many countries. Health personnel must then be trained in accordance with these plans with a view to placing at the disposal of the system the right kind of manpower, in the right numbers, at the right time, and in the right place. Further objectives are to produce health workers who are socially motivated, and to ensure that the necessary incentives are provided to encourage them to serve the communities that make up the majority of the population.

The Committee was of the opinion that to give effect to the HSMD approach in the individual countries, it would be necessary for health ministries, other relevant ministries, and appropriate educational bodies to review together the education and training of all categories of health personnel. In this exercise, account must be taken of the number, type, and quality of the different categories of health worker required, and also of the role of these health workers in supporting communities in the provision of self-care. The Committee emphasized that, in the light of such a review, efforts would have to be made to achieve the introduction of the necessary reforms by schools of medicine, nursing, and health sciences, and by other relevant training institutions, so that, in addition to receiving the necessary technical training, health personnel become imbued with the philosophy of health development as defined in the Declaration of Alma-Ata and the Global Strategy for health for all by the year 2000.

The Committee recognized that the development of nursing personnel to meet the needs of entire populations implied that nurse manpower planning, production, and utilization would have to be integrated with national health and manpower policies and plans in

the context of socioeconomic development. The general education system in the individual countries also has relevance.

In many countries, this approach is constrained, at the present time, by the inadequacy of statistical information in respect of total nursing personnel. It is essential to develop information systems that will allow the deployment and utilization patterns of nursing personnel to be monitored and provide a basis for replanning and reprogramming.

The Committee noted that there is often an imbalance in the increase in the number of various categories of health personnel, and in their deployment, between developing and developed countries, and also between professional and non-professional categories of health workers in the same country. For example, in many developing countries, where large segments of the population have little or no access to health care, the formation of community-based health workers has been accelerated in response to this situation, but sometimes the production of this type of worker has far exceeded that of other categories, especially nursing personnel. This development has failed to take account of the fact that nursing personnel are essential for the effective functioning of community-based health workers in order to provide supportive supervision and continuing education for these personnel, to sustain their motivation, and to monitor their quality of work. In many instances, the number of training programmes to prepare health personnel to function in a supervisory capacity was considered to be inadequate to meet the need for such workers.

The Committee was in no doubt that the reorientation of health systems on the basis of the primary health care approach and the integration of health service and health manpower development involved changes in the functions and responsibilities of all categories of health personnel. It believed that relevant changes were under way in many countries but, in respect of nursing personnel, it considered that there was need to establish a clearer understanding of their actual and potential roles.

2.3 The role of nursing personnel

The Committee recognized that the functions and responsibilities of nursing manpower within individual countries depended on various factors, for instance: on the structure of the health service, whether the nurse worked alone, as a member of a team, at first-

contact or at referral level; on the type and availability of other health workers; on national policies and plans for health systems and health manpower development; and on acceptance by the public of the policies governing nursing practice. It follows that the role of nursing manpower will differ from country to country and that any definition of this role, capable of universal application, must be of a flexible nature.

In considering the role and functions of nursing personnel, the Committee addressed itself to the three levels within the health system that it had previously accepted as common to most countries, although capable of expansion in the context of individual countries—namely, the peripheral, intermediate, and national levels. It believed that specific roles and functions of nursing personnel could be identified at each of these levels.

At the peripheral level, nursing personnel are often involved in providing direct care to the community, either on an individual basis or as members of teams. Generally, their role includes arousing the interest of the community in the benefits of a positive health approach and collaborating in identifying health and health-related problems and priorities for action. In meeting the health needs of the community, nursing personnel are often involved in training community health workers and may also be involved in improving and extending the knowledge and skills of traditional health practitioners. Where such cadres of local health workers exist or are formed, nursing personnel are frequently responsible for their in-service training, supervision, and support. Nursing personnel may also be responsible for the evaluation of community-level health activities and for providing direct care as necessary.

The intermediate level of the system may relate to a health centre with a few inpatient beds, or to a district with specialized and training hospitals. At this level, the role of the nurse may include, in addition to the direct care function, the planning, development, and management of district programmes and guidance to, and supervision of, local-level staff and community-level activities.

At national level, nursing personnel may function within the health ministry and participate in the managerial process for national health development; they are likely to be involved in the overall direction of the total health programme, in consultations, and in the provision of management support.

The three levels of nursing personnel identified are interdependent and their functions are interrelated.

The Committee appreciated that, in order to make health services accessible to all, changes in the accepted roles of health service personnel would be essential, involving the delegation to others of services traditionally provided by nurses, midwives, physicians, and other professionally qualified personnel, leading to an upward shift in levels of responsibility.

It was noted that, to date, the most dramatic changes that have occurred in the roles and functions of nursing personnel engaged in health systems based on the primary health care approach were their involvement in diagnostic and therapeutic activities at both peripheral and intermediate levels. In order for nursing personnel to develop their roles in this way, it becomes necessary for them to teach community health workers and traditional health practitioners many of the functions that they had previously undertaken themselves, such as: guiding and supporting communities in the promotion of health; the prevention of disease; case finding; the identification of high-risk groups; community health programme development; individual and family care, including the provision of community services; and the making of referrals. In some places, nursing personnel were finding it necessary to undertake functions and to accept responsibilities traditionally reserved to medical practitioners, including the examination of the sick and disabled, the treatment of acute conditions, the identification of the source of health problems, and the prevention of the major preventable diseases in the community.

2.4 Changes required in education and training

The strategy for attaining the goal of health for all incorporates clear guidance in terms of planning educational programmes for nursing personnel and of identifying the relevant competences that need to be developed, taking into account the roles and functions discussed in section 2.3. It was apparent to the Committee that if nurses are to be equipped to meet the real health needs and demands of people, a reorientation of all educational programmes is required at both basic and post-basic levels. The aim of such programmes must be to produce graduates capable of functioning effectively at all levels within health systems based on the primary health care approach. The development of the necessary competences will require that the educational programmes should provide experience in community health settings and health centres, as well as in

teaching hospitals. The characteristics of such programmes should be a community orientation and community-based education, and they should include learning experiences related to identifying and solving individual and community health problems through team work and intersectoral collaboration.

3. CURRENT PREPARATION OF NURSE TEACHERS AND MANAGERS IN POST-BASIC EDUCATION PROGRAMMES

3.1 Overview

The Committee received the report on a survey undertaken by WHO of post-basic training programmes for nurse teachers and administrators[1] (hereafter referred to as "the survey"). It welcomed the information in the report, which provided valuable background material for its deliberations. However, some of the survey findings caused grave concern.

It was apparent that a wide gap existed between the concepts and approaches that the Committee had been considering and the reality of the situation; the Committee was particularly concerned about the implications for basic nursing education.

It was clear that the majority of programmes preparing nurse teachers and managers were not directly relevant to the main social and health needs of the countries covered in the survey. In general, curricula continued to relate to the curative model, focusing on the teaching and management of nursing care in the hospital setting. Most post-basic schools were linked, directly or indirectly, to hospitals and most teachers in these schools were not aware of the goal of health for all by the year 2000 or of the principles of primary health care.

While only 43 countries had been covered by the survey, the Committee accepted that its findings probably reflected the present position in many other countries.

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[1] MAILLART, V. & MANGAY-MAGLACAS, A. *Report on a survey of post-basic training programmes for nurse teachers (educators) and administrators (managers)*. Unpublished WHO document HMD/NUR/83.1.

3.2 Facilities and teaching/learning resources

It emerged from discussion of the survey findings that, in many countries, both educational and care facilities in rural and periurban areas were lacking, so that, even where plans existed for the provision of learning and field experience, the plans could not be implemented. In these areas, there was also an overall shortage of qualified teachers and of appropriate learning materials. Although, in some instances, donor agencies provided audiovisual equipment, this often proved to be without regard to the setting in which it was to be used and there was need to translate learning materials into the language of the country, which was a laborious and time-consuming task, and even then the relevance of such materials remained very doubtful.

3.3 Students, teachers, and administrators

The Committee noted that the survey revealed that the typical post-basic student had received 10–12 years of general education and 3 years of hospital nursing education and had had 2–4 years of professional nursing experience. Because of deficiencies in nursing knowledge and skills on entry into post-basic programmes, time had to be devoted to compensating for these deficiencies; few programmes were available outside the post-basic schools to make up for deficiencies in basic nursing education.

It was apparent that a wide variation existed both between and within countries as to the ways in which teachers for post-basic programmes were selected. Few of these teachers appeared to be experienced in, or even informed about, the primary health care approach to health for all by the year 2000. Those who had relevant experience were generally qualified in public health nursing and for the most part held part-time appointments. It appeared that teachers often carried excessively heavy teaching loads, especially as demands increased from students for guidance during their field work experiences. As a result, teachers had little time for planning and preparation, to review curricula, or to study and undertake refresher courses. It was noted that approximately half of the schools covered by the survey were experiencing difficulty in recruiting qualified faculty members to offer courses in education and management.

However, the survey did indicate that the teachers involved seemed to have a positive attitude towards curriculum changes for the primary health care approach, although they appeared to lack

the necessary motivation to take action. Possible reasons for the lack of motivation included: lack of time, frustration due to the negative attitude of administrators, an inadequate understanding of the roles of nurses in primary health care, lack of incentives, and an absence of financial compensation for their labours. Furthermore, few teachers seemed to feel themselves capable of designing a curriculum based on primary health care.

It also emerged from the survey that, for the most part, heads of post-basic schools and programme directors were not nurses. While the Committee accepted that the most appropriate qualification for the head of a post-basic school was open to debate, it considered that in schools preparing health service personnel the most dynamic leadership was likely to be provided by a committed member of the particular discipline.

The initiation and implementation of change required both professional and administrative support. However, even where there was administrative commitment to change, this did not necessarily result in the allocation of the necessary funds for its implementation. Schools that reported having started on the change process often appeared to have difficulty in securing the financial support required. Schools that had not embarked on any curriculum change anticipated difficulty in finding teachers willing to devote the time necessary to work on such change.

The survey revealed a trend towards the decentralization of authority and responsibility in post-basic schools to heads of schools or programme directors and the increasing involvement of students in programme evaluation. In half of the schools surveyed, directors and students were regarded as having a key role in the process of curriculum change. Trends of this nature were seen by the Committee as constituting an important stage in administrative reorganization, supportive of the wider participation advocated in the primary health care approach.

3.4 Curriculum

While the survey recorded that curriculum revision had occurred or was planned in three-quarters of the schools involved, it appeared that many of the changes consisted only of a minor rearrangement of programme content or field experience, increases or decreases in the number of elective courses required, or the elimination of repetitive content. However, a more fundamental redirection towards primary

health care was evident within the WHO Regions of Africa and South-East Asia in countries in which post-basic schools were relatively new and experimental and had the support of WHO and/or other international organizations. Collaboration within and among schools in the same country and with outside agencies was considered essential to achieve curriculum redirection; this was clearly desired by schools and was seen as a means of shortening the time required to introduce and effect change. In schools in which revised curricula had been introduced, the most important changes resulting were seen to be a sensitization of students towards the primary health care approach to health for all by the year 2000, increased consumer involvement, and the strengthening of relationships between school and health service personnel.

It appeared from the survey that nearly all post-basic schools had written programme objectives, that programmes were organized to help students to achieve these objectives, and that field/clinical practice contributed to the development of skills. However, it seemed that the objectives were restricted to care in hospital settings with a concentration on a disease/cure spectrum, rather than on learning concepts and care relevant to the primary health care approach.

The survey disclosed the perceptions of teachers as to the areas of primary and secondary importance in curriculum redirection. The majority of schools gave primary importance to goals related to the improvement of the educational processes and the learning and application of the problem-solving process in a variety of health care settings. The Committee considered that if these goals were pursued vigorously, curriculum reorientation would be hastened. However, it was concerned that priority was not being accorded to the provision for full-time teachers, of continuing education in the realities of community health care. It also noted, with disquiet, that there was no discernible trend that post-basic schools were assuming a leadership role in the development of health systems based on the primary health care approach, and that the involvement of professional nursing associations in efforts to reorient post-basic curricula to the primary health care approach was very limited.

3.5 Competences of graduates

In considering the competences of graduates of post-basic programmes, the Committee noted from the survey that the

management knowledge and skills acquired related to (*a*) controlling the quality, quantity, and results of work, (*b*) determining the functions and priorities of various levels of health personnel, (*c*) coordination between units/teams/programmes, and (*d*) establishing information systems; and that there was a concentration on these activities within the hospital setting. Management graduates were not, and were not expected to be, skilled in policy formulation, planning and defining policy objectives, in administering budgets and accounting for expenditure, or in providing statistical information; nor were they capable of managing a health team composed of different cadres of health workers outside the hospital setting. It was clear that some post-basic schools considered that the acquisition of skills related to primary health care was appropriate only after the graduate had gained experience at "junior" management level. This demonstrated a lack of understanding of the concept of primary health care as the main focus and unifying theme of a health system and, therefore, the basis of health care at all levels. It was recognized that the role of nurse managers in health systems based on the primary health care approach is still evolving and that a clear definition of role and functions and the delineation of responsibilities and organizational relationships are highly relevant to the development of educational objectives for the training of managers.

The response as to the skills of graduate educators was a more positive one. They were thought to be largely competent in planning and implementation, with the exception of curriculum design, evaluation, and the setting of programme objectives in relation to outcomes desired in primary health care. It appeared that the functions of graduate educators were more readily defined than those of graduate managers; it was therefore easier to identify the requisite skills for their performance.

The Committee noted that there was a greater interest on the part of students in entering management programmes and considered that this was probably due to a greater career choice and career mobility following graduation. However, the Committee observed that there was a trend away from functional specialization towards the integration of educational and management skills, particularly in respect of some areas of nursing practice, of which maternal and child health was quoted as an example. It was considered that this trend was supportive of the view that a common core of learning should be provided for potential managers and educators and that this should lead to an increased understanding of respective roles.

The Committee believed that these roles were complementary within the primary health care context, as the nurse who manages a health team has a responsibility for the education and training of its members as well as for educating members of the community served by the team; and the nurse educator can properly be regarded as the manager of the learning process, which requires an understanding of the systematic application of management skills in learning situations.

The Committee was very conscious that final decisions in respect of significant change were usually taken at the policy-making level within any structure; it therefore attached great importance to nurse graduates acquiring skills in policy formulation in order to exert an effective influence at that specific level. The absence of this competence was seen as an impediment to achieving change.

3.6 Evaluation

The Committee noted with concern that sound evaluation procedures in relation to post-basic programmes appeared to be lacking in the schools surveyed. This applied to students' performance and to graduates' performance on completion of a programme, and to the effectiveness of teachers and of the programme itself. Evaluation procedures in existence appeared to lack planning and consistency in application. The results of evaluation were seldom fed back into the system as a basis for review and replanning.

4. REORIENTATION OF POST-BASIC EDUCATION

4.1 Changing the philosophy and the conceptual frame of reference

In the light of its review of the present situation and its commitment to health for all through primary health care, the Committee was convinced of the need for urgent action to bring about a radical change in the philosophy and conceptual frame of reference of post-basic educational programmes.

Fundamental to the radical changes required was a clear understanding, by all involved in the change process, of the need for health systems that are designed to meet the health needs of total populations and that include both health services and community level activities, supportive of health, in one and the same system.

A persistent theme running through the Committee's deliberations was the need for attitudinal change; a new way of thinking about health and health care provision must be brought into being. This change of attitude needs to permeate society from the level of government to that of the local community. The health professions have a key role to play in promoting this change, but first they must themselves have a clear understanding of, and a commitment to, primary health care; they must also have the ability to interpret primary health care in the context of the health care system prevailing in their individual countries.

Orientation of a health care system towards the primary health care approach involves a whole change in relationships between different categories of health workers and between them and the community—extending from national to peripheral level. The distinction existing between the providers of care and the recipients of care will no longer be the same: all will be involved in the system on a basis of partnership.

This altered conceptual frame of reference must be reflected in the post-basic education of nursing personnel. The role of the teacher must become that of the facilitator of learning; this applies equally in situations outside the post-basic school, for instance, where other health workers learn from graduates of the schools and where the community learns from those of its own members who have received training to become community-based health workers.

Within this altered framework, changes in the roles of the manager and the teacher must take place in parallel. The teachers of post-basic courses must employ management approaches that can be used by students who, on graduation, will become managers within the health service. Where the health services are in direct contact with the community, the type of management approach needed includes the ability to coordinate the community system with the health service system. At this level, the management function is shared with community health workers and involves the use of mechanisms established to facilitate health development, such as health committees.

An awareness is required of the urgent need for cooperative action between the health sector and other development sectors, for example, education and agriculture. Not only must the different, sometimes fragmented, components of the health sector be brought to work together, but practical approaches and strategies must be evolved for intersectoral cooperation.

The Committee was in no doubt that the fundamental changes required involved more than the acquisition by teachers and managers of an intellectual grasp of the attainment of health for all through primary health care. The reorientation of post-basic education will require action to be taken on several fronts simultaneously. The traditional focus on disease and institution-based care must give way to an emphasis on positive health and wellbeing in the context of a more social orientation to health; individuals must be seen as members of families and of communities. Considerations of disease, treatment, rehabilitation, and alternative outcomes will then fall into place. The Committee was of the view that to achieve this orientation educational programmes must shift their setting from the hospital to include community-centred and community-based learning opportunities.

The Committee welcomed initiatives that have already been taken in some countries to bring about a change in philosophy and to reflect this in educational programmes. The experiences of two countries are set out in an annex to this report.

4.2 Identifying the competences required

The Committee sought to identify the competences that nurse teachers and managers need to develop through post-basic education in order to function effectively in health systems reflecting the changed philosophical and conceptual framework. It believed that certain competences should be seen as the desired outcome of all educational programmes, basic, post-basic, and continuing education, while others were more specific to the roles of teachers and managers and would therefore be developed, or developed further, in post-basic programmes.

The competences that should be developed in all educational programmes and in post-basic programmes for teachers and managers, respectively, are set out below in sections 4.2.1–4.2.3. In this connection, the Committee gave consideration to definitions in respect of basic, post-basic, and continuing education and the agreed texts are given in Annex 2.

4.2.1 *All educational programmes*

The graduate should be able to respond to the health needs and expressed demands of the community so as to:

—stimulate a healthy life-style and self-care;
—educate the community and other health workers;
—solve or assist in the solution of both individual and community health problems;
—orient their own as well as community efforts for health promotion and for the prevention of diseases, unnecessary suffering, disability, and death;
—work in, and with, health teams, and if necessary provide leadership to such teams;
—stimulate, promote, and coordinate intersectoral collaboration for health;
—continue learning life-long to keep competence up to date and improve it as much as possible.

The basic education programme should provide some preparation for teaching and management because there are teaching and management components in the role of all graduate nurses. For example, nurses are required to organize, teach, and supervise support staff; to educate individuals and communities in positive health measures, in self-care, and in the development of self-reliance; to manage the environment in which care is provided; to plan, implement, and evaluate the care of individuals and groups; to communicate effectively and to collaborate with other health workers.

4.2.2 *Post-basic programmes for nurse teachers*

The competences required of nurse teachers must stress their role as facilitators of learning at all levels of the health system.

They require a full knowledge of, and commitment to, the changed philosophy described above so that they can reflect it in designing and implementing curriculum changes in both basic and post-basic nursing education programmes.

The competences of teachers also include the ability to adopt new approaches in planning, implementing, and evaluating educational programmes at all levels. The development of such programmes will necessitate competence in practical skills and in traditional and innovative teaching and learning experiences in a variety of settings, including community level. The team approach essential to primary health care development will require that the teacher is competent in assessing the role and functions of individual team members, in

understanding and implementing alternative methods of team-work, in facilitating the development of leaders at all levels of the health system and, not least important, in working with those in other development sectors.

In developing innovative teaching and learning approaches and practices, competence will be needed in preparing, using, and evaluating a variety of learning aids, in educational research processes, and in disseminating and using research findings in the improvement of teaching and practice.

Teachers must be able to build on the previous experience of their students so that learning becomes a continuous process. This approach will result in teaching becoming learner-oriented and focusing on the production of "action-oriented" graduates.

Several levels of intellectual skills and expertise exist in the various competences identified. Additional training and education is necessary for leadership roles in education and research, in keeping with the general standards of other professional disciplines in the individual countries.

4.2.3 *Post-basic programmes for nurse managers*

The competences required of nurse managers are largely determined by the components of the management process and by the level at which the manager operates—national, intermediate, or local; this view accords with the approach described in *Managerial process for national health development* (*5*). While the components are common to all levels, the weight of the individual components will differ between levels, as will the managerial function. For example, at national level the competences required will include in-depth knowledge of management theory and wide managerial experience, as well as the ability to operate effectively as a member of an interprofessional and intersectoral team. At local level, the nurse manager must also be able to operate as a member of an interprofessional and intersectoral team, but the managerial role will be of a less complex and less sophisticated nature.

Management competences include the ability to formulate policies, to translate policies into programmes, to budget, to produce action plans, to implement plans, to determine management and organizational systems, to maintain financial controls, to monitor progress, to evaluate outcomes, and to feed back results into the replanning cycle.

The competences required of the manager can be developed through experience in the managerial role, providing there is a sound knowledge base. Nevertheless, a system of continuing education is necessary to sustain this development. The manager who has demonstrated competence at local level requires additional education to prepare for the extended management role at intermediate level. Nurses who are to operate at national level require further education in management; this will be most relevant and efficacious if it is undertaken along with managers of other professions with whom the nurse manager will subsequently work in interprofessional and intersectoral teams.

4.3 Developing the objectives of post-basic education

The Committee was of the view that it was neither appropriate nor feasible to produce a blueprint for post-basic educational programmes designed to prepare nurses for managerial posts in the health services, in organizations and agencies, or for teaching posts in basic nursing education programmes, as these will invariably have to be national products produced by the competent national authorities.

It considered that the first task of educational planners should be to define the specific competences that students need to meet the real health needs and demands of the population they are to serve and the requirements of a health system based on the primary health care approach. These competences (see section 4.2) should form the basis of the objectives of post-basic education and of curriculum content.

In the context of primary health care, not only as a guide to action but also as a philosophy that permeates the whole of the nursing input to the health care system, the objectives of post-basic education should be to produce graduates capable of the following:

—introducing the concepts and practices of primary health care into all components of nursing education and practice as rapidly as possible;
—participating in the planning, management, and monitoring of patterns of needed health care in accordance with the socioeconomic, educational, cultural, epidemiological, and health service realities of the country;
—participating in health policy-making from governmental to community level, including priority setting, budgetary allocation,

and action-orientated decision-making;
—participating in achieving a more rational balance in health care, especially in relation to the planning, production, and utilization of nursing personnel to provide essential, accessible, and acceptable health care to meet the primary, secondary, and tertiary needs of the population;
—planning, implementing, and evaluating basic and continuing education for a variety of nursing personnel, using not only effective conventional techniques but also new strategies for teaching and learning more suited to primary health care;
—accelerating coordination within the health sector between various components and services to increase the effectiveness of plans for the deployment of human and material resources;
—accelerating the coordination of the health sector with other development sectors, such as education, agriculture, social welfare, community development, and public works;
—participating in research in health manpower and health services development and management as a contribution to the emergence of further innovative patterns for primary health care development;
—participating, in a partnership relationship, in working with communities to develop viable and effective strategies, plans, and mechanisms to promote increased self-care and self-reliance.

4.4 Implementing the post-basic programme

The Committee believed that the educational approaches and practices that students encounter in post-basic education influence their future performance and attitudes as teachers and managers. In this context, it considered that team-based and action-oriented educational approaches were of particular relevance; for example, the use of participatory methods of teaching and learning are more in accord with the adult status of the students than methods that differentiate rigidly between teacher and student. The principles and practices of adult education lay stress on creating an atmosphere in which mutual learning occurs and this should be the aim of post-basic schools.

A first step in this direction is to make curriculum development a joint venture between teachers and students so that each can better understand the resulting educational process and feel a sense of responsibility for it. In this approach, the student ceases to be a

passive recipient of teaching and becomes an active participant; learning becomes a two-way process for teacher and student. Unless future teachers of basic nursing programmes experience this type of learning process in post-basic education, they will not be equipped to offer learning experiences of a similar nature to their students and basic programmes will continue along traditional lines. Teaching approaches that place emphasis on lectures and demonstrations may serve the purpose of relaying information to students, but they do not provide an appropriate model for a learning process to be replicated by graduates in their future work at various levels in the health system. The ability to share ideas and experiences is fundamental to the development of the type of health manpower needed in systems geared to primary health care.

The Committee emphasized the need for innovative teaching and learning techniques that would "bring the community into the classroom", but believed that it was of even greater importance to "take the classroom into the community". It considered that the prime aim should be "community as classroom", in which students, teachers, and community would be mutually involved in teaching/learning processes.

There is a clear and urgent need to introduce or increase community field work experiences in post-basic programmes in order to provide students with the opportunity to gain insight into the realities of community-level activities and to develop skills in case-study methods, in interviewing techniques, in communications, and in information gathering, processing, and reporting.

The learner is the focus of the educational process and the process must take account of the pace and ways in which individual students learn so as to include the methods and means required. The teacher helps the student to learn, selects appropriate methods and materials, serves as a role model, creates an environment supportive of learning, and provides for regular periodic assessments and discussion of results so that the student is aware of the progress made and the efforts still required to achieve the mutually agreed learning objectives.

In the past, there was a tendency to assume that the possession of technical competence, associated with professional experience, was synonymous with an ability to teach, but the importance of learning the skills and art of teaching is now more fully appreciated. Genuine teaching experience in a post-basic programme is essential for the development of skills and confidence.

Problem-solving skills are essential components of the nursing role in primary health care and must therefore be developed in post-basic courses through the provision of real situation experiences. For example, post-basic students in conjunction with a faculty member may assess a community situation, such as a high pregnancy rate in an unmarried, teenage population; having defined the need, a plan of action can then be determined, implemented, and evaluated. This involves teachers and students in a community diagnostic exercise as a basis for planning and developing appropriate action. The research and development approach, which has been employed effectively in the WHO Western Pacific Region, provides another method of situational analysis and subsequent action. This approach involves health manpower and communities in rapid survey processes in which both identify priority problems and plans of action. Such experiences provide a solid basis for planning educational programmes at different levels of the health system, including post-basic nursing programmes.

4.5 Evaluating effectiveness

The Committee considered that evaluation procedures in post-basic education should extend beyond the traditional measurement of the extent to which specific objectives have been achieved. They should also be concerned with assessing how the programme functions and the context in which it operates and should aim to identify problems and issues encountered and any unintended outcomes and elements that have facilitated or impeded progress. This approach requires the development of participatory methods of evaluation and involves teachers and students at each stage in the process, not only in the identification of goals but also in the selection of evaluation procedures and their implementation, in the analysis of the findings, and in action based on the findings. In this way evaluation becomes a collaborative undertaking involving shared interests and shared goals.

A variety of methods can be used to evaluate the effectiveness of programmes, in addition to the traditional assessment of student performance by examinations largely designed to test the short-term retention of information. In the last analysis, the effectiveness of an educational programme can best be judged by the performance of its graduates, by an assessment of their ability in meeting the specific needs of the communities they serve. The result of such assessments

should lead to a periodic review of the school's objectives, curricula, and the learning experiences provided. Assessment is also required of the appropriateness of teaching/learning methods, of the teachers' effectiveness in promoting learning and, ultimately, of the extent to which the achievement of the programme objectives by graduates facilitates or improves their performance as teachers or managers. In developing new methods of evaluation, ways and means should be sought to involve the community—the recipients of the graduates' services—in the procedure.

This approach to evaluation, followed by relevant action, should ensure that educational programmes remain responsive and relevant to the present and evolving health needs of the individual countries.

5. AREAS FOR CHANGE AND FACTORS INFLUENCING THE PROCESS OF CHANGE

5.1. Health manpower policy

There is no doubt that behind the qualitative and quantitative problems discussed above lies the lack of relevant health manpower plans and policies. These policies should be designed to satisfy the health needs of entire populations through health services composed of teams of health personnel, on the principle that all health activities should be undertaken at the most peripheral level of the health services as is practicable, by the workers most suitably trained to carry out these activities. This requires that the training of all categories of health worker is made relevant to community needs and demands and involves a reorientation of a range of manpower training patterns.

The development of a health manpower policy has implications for planning changes in post-basic education. In the absence of such a policy, efforts to develop plans for comprehensive change are undermined and lack coordination; different agencies, associations, and institutions may work at cross-purposes or duplicate effort. A health manpower policy can also assist in convincing other agencies and organizations in other relevant sectors of the need for their cooperation and support, in political, financial, or technical terms,

in order to bring about a reorientation of post-basic programmes.

Other policies affect the progress of reorientation and may act as facilitators or deterrents of change—for instance, those relating to health care and educational institutions and, in particular, any statutory (legal) provisions in respect of the content of educational programmes for nurses and of nursing practice. Those who are responsible for, or involved in, the reorientation of post-basic education therefore need to review any existing national health manpower policy, as well as other relevant policies, so that they are fully aware of the context in which their reorientation efforts must be undertaken and are able to identify potential areas of support and of difficulty.

5.2 Attitudes and values

A commitment to the goal of health for all and to the Declaration of Alma-Ata, as well as an acceptance of social responsibility for health care for all people, is fundamental to the effective reorientation of post-basic nursing educational curricula. Such a commitment will require substantive change in the direction of educational policy, in the attitudes and values of the directors and teachers concerned with post-basic education, and of the administrators and the students themselves. The facilitation of the reorientation process depends, in large measure, on the ability of staff and administrators to motivate and to set an example to the student body; but the Committee noted with interest that, in some instances, the student body has provided the initial impetus for change.

In this context, the Committee again expressed its concern that the survey of post-basic programmes (see section 3) had revealed that, with few exceptions, the content of the questionnaire had appeared to be the first information on primary health care received by the respondents; without full information there can be no real commitment and no stimulus for action. It therefore stressed the need to persuade educational programme directors and administrators to think about existing health care systems and their failures or shortcomings in meeting the health needs and demands of majority populations.

The Committee believed that a useful approach was to encourage directors and administrators of post-basic programmes, together

with nursing service personnel, to engage in some community-level investigations into the health status of the population. Direct experience of the realities of the life of the majority would also provide them with information about the real availability, accessibility, and functioning of the existing health system. Activities of this kind should assist towards a realistic appreciation of the urgent need to develop policies and implementation procedures to achieve a reorientation of post-basic education relevant to the needs of a health system of which primary health care is the focus. Additionally, it was considered that "crash courses" for teachers in post-basic schools would be necessary to provide them with relevant information about the primary health care approach to health for all by the year 2000, to achieve their commitment to this approach and goal, and to motivate them to take action to bring about an early reorientation of post-basic programmes.

5.3 Leadership

Effective leadership is a key factor in motivating people, bringing about change, and maintaining morale. Natural leaders emerge within most groups, but leadership qualities can be developed.

Leadership is of crucial importance in the reorientation of post-basic education. Leaders need to be identified and supported at all levels within the system, particularly at local level, where the development of health systems based on primary health care will give rise to a real need for leadership. Workshops on leadership can contribute to the development of leaders and relevant guidelines are available; such workshops can usefully be organized at interregional, regional, or national levels.

Strong leadership is required at national level, not only to encourage the development of leaders at other levels but also to emphasize the role of nursing personnel in effecting change within the health system and to support their endeavours.

The Committee believed that a valuable initiative in many countries would be the bringing together, at national level, of a corps of nurses who had already achieved recognition as leaders at different levels within the health system, who were in a position to exert influence, who had the confidence of professional colleagues, and who, desirably, had a network through which to communicate widely. The individuals meeting such criteria would differ from

country to country as to the actual positions held, but they should be capable of ready identification. National nurses associations might well be the appropriate bodies to take the initiative in establishing such a corps.

The aim of this leadership group should be to promote among nursing personnel knowledge of, and commitment to, the primary health care approach to the provision of comprehensive health care and to emphasize that this approach is relevant in all spheres of nursing practice. The tasks involved would include initiating, planning, informing, motivating, supporting, and monitoring activities and outcomes. In the course of this process, other potential leaders should emerge at the various levels in the structure and become involved in providing leadership within their own communities; those persons already qualified in public health nursing and practising in peripheral areas could play an important part at community level.

The Committee saw this as a means of mobilizing nursing manpower towards the development of primary health care and also as a valuable means of facilitating and expediting the reorientation of basic and post-basic educational programmes. However, it recognized that not all nursing leaders may yet themselves be convinced of, or enthusiastic about, the need for a changed approach to health care provision. Therefore, in the first instance, there would need to be careful selection of nurses to form the nucleus of the "leadership core" so that they could act as catalysts and involve others as they, too, became convinced.

5.4 Teachers and students in post-basic schools

The Committee was gravely disturbed by the difficulty encountered by post-basic schools in finding teachers prepared in the educational sciences who also had practical experience of primary health care; this shortage of specialists in primary health care constituted a major difficulty in sustaining consultancy help in curriculum redirection, implementation, and assessment.

It was also apparent from the survey that those currently engaged in teaching experienced a lack of opportunities for continuing education to keep them abreast of developments in educational planning, methods of evaluation, and nursing care processes conducive to health promotion and maintenance. Furthermore,

teachers often felt themselves to be relatively isolated from each other, particularly in countries in which post-basic nursing schools are few in number or do not exist as such.

The Committee was of the view that it might be practicable and helpful to develop networks of post-basic nursing education programmes in which those involved have a common concern in improving the training of nurse teachers and managers to equip them to function effectively in health systems based on primary health care. This network concept implies collaboration in the use of resources, both human and material, and the linkage of training programmes to facilitate development. Those involved in the network would be enabled to learn from their joint ventures, to improve existing programmes, to establish new ones, and to become increasingly self-reliant. Collaboration might relate to such activities as: curriculum design; the preparation of teaching materials; the development of improved teaching approaches, practices, and appropriate methods of assessment; the sharing or exchange of learning facilities and resources; the identification of research topics and joint research ventures; and the exchange of teachers and students.

It was apparent to the Committee that the criteria for the selection of teachers for post-basic programmes varies widely from country to country. It considered that new criteria would need to be developed in the individual countries relevant to the objectives of programmes reoriented to the primary health care approach. These criteria should reflect priority requirements, such as motivation, a sense of social responsibility, and a commitment to primary health care, all of which are difficult to assess using traditional methods of recruitment and selection. Those responsible for teacher selection therefore require training in new methods, including interviewing techniques and communication skills. The new methods might include such practices as group review of candidates by faculty, along with nurse managers from affiliated practice areas.

Another problem encountered by post-basic schools, as revealed in the survey, was that students entering programmes were often deficient in intellectual and practical skills that should have been acquired in basic programmes. It was considered that these deficiencies could be the result of shortcomings in the curriculum design of the basic programme, in the teaching and learning methods used, or in the capabilities of the students to learn and to utilize learning, arising, perhaps, from deficiencies in general education.

Whatever the cause of the deficiencies, the Committee was of the view that it was necessary to undertake a thorough assessment of those wishing to enter post-basic programmes in order to determine whether remedial measures were needed to upgrade their skills to the standard required to meet entrance requirements, so that those accepted could benefit fully from the programme. Remedial measures might include the provision of a refresher or pre-entry course before admission to the post-basic programme. Where, in any country, the deficiencies identified were found to be common to most of those seeking admission to post-basic courses, this would imply that the basic-level curricula, or teaching/learning methods, or both, required upgrading. It could also imply the need to revise the conditions of admission to basic programmes to ensure adequate achievements in general education, as such deficiencies are difficult to remedy at a later stage.

The Committee was in no doubt that a sound assessment of those seeking entrance to post-basic programmes is essential in order to establish their preparedness for such training as well as to provide a basis for evaluating the efficiency and effectiveness of the post-basic programme itself.

The Committee recognized that there is a diversity of viewpoints as to the appropriate age of entry to post-basic programmes and as to whether or not age should be taken into account. In some countries, both minimum and maximum ages are laid down, in others age is not considered to be important. Again, in some countries, the maturity of the potential student is considered to be a relevant factor, but maturity is difficult to assess, as it depends on the individual and on life experience rather than on educational achievement; age is not a reliable indicator of maturity, although in some countries it is so regarded. The Committee concluded that age of entry and the assessment of maturity were matters that could best be determined within individual countries in the context of their cultural and educational norms.

5.5 Siting of educational programmes

In most countries, both basic and post-basic nursing schools have been closely linked to hospitals, and in many instances hospitals have depended, in large measure, on the student population for the provision of patient care. Where this traditional practice still

operates, the Committee recognized that, in the context of proposals for curriculum change geared to primary health care, it may constitute a source of conflict between directors of basic and post-basic schools and their staff, on the one hand, and hospital administrators, nursing service directors, and physicians, on the other. Curricula developed with primary health care as their main focus and theme necessitate students acquiring health care experience in community settings to a greatly increased extent; this will render them less available to care for patients and assist physicians in hospitals. But hospitals that are themselves geared to the primary health care approach can be supportive of the reorientation of basic and post-basic programmes of nursing because, in most countries, hospitals still enjoy the highest status and have the greatest prestige and political influence in the health field. Thus there is need to achieve the support of the hospital sector so that it uses its power and influence to ensure that the first-contact level and its first-support level care, within health systems based on the primary health care approach, are not regarded as second-rate but are seen as fundamental to the provision of comprehensive health care for all. The movement to health systems based on the primary health care approach will be accelerated if the support of the hospital sector can be enlisted, and nursing personnel can be influential in enlisting this support because, in most countries, they constitute the largest professional group within hospitals.

In the context of primary health care, "front-line" hospitals will need to become increasingly involved in training all categories of health personnel. They have the potential to provide learning by experience for nursing students alongside practical workers and community health workers, thus taking training out of classrooms and wards and orienting it to the needs of the community. They also have an important role to play in the provision of continuing education for all health workers. The Committee considered that health centres and similar facilities could contribute to training in a like manner.

However, the Committee recognized that there is often a constraint on providing students in post-basic programmes with field experiences in health care facilities in peripheral areas, namely, lack of the necessary transport, as most educational programmes are located in urban centres. In the interests of providing realistic field work experiences for students, the Committee believed that this was a problem that must be approached and overcome.

5.6 Resources and administrative support

5.6.1 *Resources*

Resource requirements for the reorientation of post-basic education vary from place to place, depending on the existing resources of individual institutions, including the availability of teaching/learning resources; the types of programme offered and the number of students also influence the resources required. Most post-basic schools are in need of an increased supply of better prepared teaching and support staff, and also of specific training areas, materials, and educational technology. In some developing countries, there is difficulty in obtaining even the most basic equipment and supplies, such as blackboards, chalk, and paper.

There exists a wide range of suitable educational materials but often institutions are largely unaware of them. Where materials are obtained, there may be difficulty in adapting them for the desired use; this applies both to printed and to audiovisual materials. The Committee considered that to combat these problems there was urgent need to prepare teachers to produce appropriate educational technology, at low cost, from locally available materials. It was noted that, in some countries, experience had demonstrated that teachers and students could develop considerable skills in this area, in addition to the ability to analyse critically materials produced and to improve on them following field testing.

5.6.2 *Administrative support*

The Committee was very conscious that administrative support was crucial to the change process and that unless this was forthcoming from informed and committed administrators efforts to achieve change were likely to be frustrated. Administrators play a key role both in obtaining and allocating resources. It was recognized that many countries at present face a general shortage of resources for health development and that there is often a specific shortage in the allocation of available resources to the reorientation processes required to hasten the development of primary health care. In this context, post-basic schools will need to evolve relevant patterns of training that are cost-effective. However, the ability to do this will often be dependent on the provision of some additional resources, at least in the first instance, and these will only become

available with the support of administrators committed to the need for reorientation.

5.7 Research

The Committee recalled that in 1966 a WHO Expert Committee on Nursing (6) had described research as a slow process of building up knowledge fragment by fragment, frequently checked and consequently verified. While the Committee endorsed the continuing need for carefully planned and scientifically sound research, it considered that there was also an urgent need for the identification and teaching of less sophisticated and less costly research-type activities capable of generating data relevant to the planning, implementation, and monitoring of primary health care and to the development of appropriate educational programmes for a variety of health manpower, including nurses. The Committee recognized that there had been a tendency for "nursing research" to be undertaken within fairly rigidly defined parameters and often institution-based. It considered that a holistic approach was required in which research should be geared, primarily, to supporting primary health care development and with nursing research contributing to this process. Post-basic education should aim to develop a "research mentality" in students, involving a keen interest in continually analysing and learning from experience, an understanding of the importance of regular assessment as an integral part of work, and an awareness of the need to develop sound information systems and to motivate health service staff to collaborate in this activity.

Teachers involved in post-basic education must be able to assist students in the learning of the basic approaches to, and methods of, research and information collection relevant to priority health problems and their solution. Such health service research requires a capability on the part of all those involved in health care to provide information about their own activities; in order to do this they may require assistance in the selection of information and its collation. Post-basic programmes also need to prepare some researchers to a level at which they are competent to conduct or direct investigations into specific primary health care issues and to undertake systematic inquiries in relation to nursing practice. Research activities, including the systematic collection of valid information, have considerable relevance to various aspects of the management

function; the ability to identify need and to initiate or carry out the required activities is essential for good management practice; valid information is a tool of management.

Health systems research related to primary health care development is relatively new; indeed, research related to primary health care has been a neglected area in most countries. It is an area that offers considerable scope for interprofessional collaboration and activity. However, in order to assist in the identification of research topics in primary health care specific to nursing, and to support research at this level, research will also need to be undertaken by nurses at the various levels in the health system.

The Committee considered that the research activities that should be undertaken, as a matter of urgency, included systematic studies of existing approaches and practices in the development of primary health care, such as interprofessional training and team-work and innovative patterns of organization and deployment of manpower. It believed that information about the outcomes of such innovations would provide a valuable basis for the promotion of appropriate patterns of primary health care development in the various countries and it was in no doubt that nurses had a substantial contribution to make in this sphere.

5.8 Nurses as agents of change

At the start of its deliberations the Committee referred back to the recommendations of the WHO Expert Committee on Community Health Nursing in 1974 and was of the view that, if the climate had been supportive of the implementation of those recommendations, nursing would have been in the forefront of the primary health care movement (*1*).

During its deliberations, the Committee became increasingly convinced of the key role of nurses in bringing about the necessary changes to achieve health systems oriented to primary health care. In most countries, nurses are the most important group of health workers, in terms of numbers, closeness to prevailing health problems, and understanding of community needs.[1] In order for nurses to realize their potential as agents of change, however, they

[1] *Report of a meeting on nursing in support of the goal of health for all by the year 2000, Geneva, 16-20 November 1981.* Unpublished WHO document HMD/NUR/82.2, p. 7.

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must be equipped with the relevant knowledge and skills. This serves to emphasize the importance and urgency to be attached to the reorientation of post-basic programmes for the preparation of nurse teachers and managers.

The Committee noted that primary health care is one of the social phenomena of our times, with powerful potential for improving the quality of human life. This objective has always been a fundamental driving force for nurses and nursing. The Committee was in no doubt that the harnessing of nursing experience, energy, capabilities, and commitment would add greatly to the momentum of primary health care development and would accelerate its achievement.

6. RECOMMENDATIONS

The Committee recognized the urgency of orienting nursing personnel to primary health care as the key to attaining health for all by the year 2000, and affirmed that the reorientation of post-basic education of nurse teachers and managers was central to this development and should be accorded priority. It made the following specific recommendations:

1. Post-basic nursing education should be reoriented in the context of comprehensive national health manpower development policies and plans that reflect the rational and appropriate deployment of all health personnel in accord with the primary health care approach to health for all by the year 2000.

To give effect to this recommendation it will be necessary to:

- —promote the development of health manpower policies where none exists and encourage the participation of nurses in the formulation of such policies;
- —promote the development of information systems relevant to the planning, production, and management of nursing personnel;
- —initiate action to effect change in educational policies and the policies of other relevant bodies where these constitute a constraint on the reorientation of post-basic nursing programmes;
- —identify and take action to achieve any changes needed in statutory (legal) requirements in respect of nursing education and/or nursing practice.

2. Action should be taken immediately to reorient all post-basic programmes for nurse teachers and managers so that the principles of the health for all goal through primary health care become the unifying conceptual frame of reference.

To give effect to this recommendation it will be necessary to:

—provide crash courses to reorient directors and teachers of post-basic nursing schools/programmes;
—convene a small corps of nursing leaders at national level, made up of those who have demonstrated leadership ability at different levels in the health system, to act as a catalyst group and to initiate, plan, inform, motivate, support, and monitor primary health care developments in nursing and to facilitate the reorientation of post-basic programmes;
—establish a system of continuing education to ensure that those engaged in teaching and managing in educational institutions and practice areas keep their knowledge and skills updated in support of primary health care development;
—take action to increase the number of qualified teachers with field experience in primary health care to assist in the reorientation of post-basic programmes and the preparation of relevant curricula;
—identify the competences to be developed through post-basic programmes for nurse teachers and managers to meet the health needs and demands of communities in health systems oriented towards primary health care and use these as a basis for defining learning objectives;
—provide learning experiences that are community-based and community-focused with community involvement to facilitate the achievement of those learning objectives.

3. Problem-based, practice-oriented, and team-focused educational processes should be developed for nursing students that are mutliprofessional and multisectoral.

To give effect to this recommendation it will be necessary to:

—develop a problem-solving approach in students and provide them with learning experiences in real-life situations and in simulated exercises;
—utilize such facilities as first-line hospitals and health centres to enable students to gain experience in working with traditional and community health workers;

—provide opportunities for students to gain interprofessional and intersectoral learning experiences in a team setting.

4. Institutions and post-basic schools of nursing should be strengthened through the provision of the necessary resources and administrative support.

To give effect to this recommendation it will be necessary to:

—adjust resource allocations to ensure that institutions have the resources of money, manpower, and materials essential for programme reorientation;
—encourage a positive attitude on the part of administrators towards post-basic education as the key to the development of nursing personnel equipped to contribute effectively and efficiently to health systems based on primary health care, as well as to the development of such systems;
—encourage those in the influential hospital sector to support the reorientation of post-basic programmes to become community-focused and relevant to the nursing function at the first and second levels of health care;
—support the establishment of links between post-basic schools, health service and educational institutions in other health development sectors, and the development of networks of post-basic schools, in order to facilitate collaboration in the use of resources, the sharing of knowledge and experience, and joint endeavours.

5. WHO should support all Member States in their efforts to provide nursing personnel of various categories with adequate training in primary health care and its management, and in appropriate supportive research so that they can participate in the implementation of health for all strategies. To this end, WHO should:

—encourage the adoption of the above recommendations by all Member States, their ministries of health, relevant educational institutions and statutory bodies, national nurses associations, health for all committees and other planners and decision makers in the sphere of basic and post-basic nursing education and health manpower training;
—encourage the formation of national councils to promote, support and monitor the reorientation of health systems and their personnel towards health for all through primary health

care; the membership of such councils to comprise representatives of relevant ministries, departments, agencies responsible for health care provision, health professionals (including nurses), and appropriate voluntary and consumer organizations;

—organize workshops in countries to study the education and training of nurse teachers and managers in order to stimulate action and to identify change agents and leaders;

—ensure, to the greatest extent possible, that the resources required to give effect to the reorientation of post-basic nursing education are made available and channelled to those countries having demonstrated the will to effect change;

—utilize the positive experiences of individual countries to motivate other countries to develop and implement action plans, using such means as workshops and established networks and mechanisms, including technical cooperation between countries;

—exploit to the full public relations and public information channels to disseminate information on the above recommendations to professional and public audiences both regionally and globally.

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Annex 1

EXAMPLES OF THE REORIENTATION OF NURSING PERSONNEL TO THE GOAL OF HEALTH FOR ALL THROUGH PRIMARY HEALTH CARE AND OF CHANGES EFFECTED IN EDUCATION AND TRAINING

Example 1 : Senegal

1. Background

In 1978 the Government signed the Charter for the Health Development of the African Region related to the WHO goal of health for all by the year 2000 and adopted primary health care as the cornerstone of its national health development policy. This was reflected in readjustments to its Five Year Social and Economic Development Plan (1977–81) and led to several major changes in the country's traditional system of health services management and in the delivery of services, in particular:

(*a*) The administrative structures for decision-making in the health sphere have been recast at central, intermediate, and peripheral levels, for the purpose of decentralizing the decision-making process and establishing an effective two-way communications system between the periphery and the centre.

(*b*) Basic community health facilities have been established and equipped, e.g., health huts and rural maternity facilities; these had started on a small scale some years previously but their development has been accelerated and the facilities now cover the whole country.

(*c*) Efforts have been made to inform the community in order to obtain their agreement to, and involvement in, the study of their own health problems, in the finding of solutions, and in the implementation of the necessary action.

In the light of the changes in national health policy, it became increasingly apparent that a reform of the training of nursing and midwifery personnel was essential to equip them for the functions they would be called upon to perform.

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2. Integration of the primary health care approach into training programmes

The training of nursing and midwifery personnel in primary health care is being undertaken progressively, both at field level and in academic institutions.

(*a*) *Field training*

The majority of nurses and midwives traditionally work in rural and/or semiurban areas, but in the past they were not trained to think in terms of the primary health care strategy. They tended to remain in their health infrastructure sites waiting for patients to come to them. They required further training for their new roles. The first requirement was therefore the preparation of trainers and this has been undertaken in three stages.

(i) *The training of instructors.* In the context of a plan established at national level, and applying strict criteria, nurses (both male and female) and midwives have undertaken three-month intensive teacher training courses. These courses were set up and conducted with support from international organizations (e.g., UNICEF and WHO), national agencies, and nongovernmental organizations and voluntary bodies.

On the completion of the course these personnel were expected to undertake, at local level, the supervision of their less qualified colleagues involved in primary health care activities. They were also expected to sensitize health post chiefs to the primary health care approach and to convey to them the basic principles of in-service training and the supervision of community-based staff known as community health officers.

(ii) *The training of health post chiefs.* At the local or intermediate level, seminars are held for small groups of health post chiefs. The educational objectives set are very limited, but subsequent supervision enables an assessment to be made of the extent to which any necessary changes in approach have been achieved or other shortcomings remedied.

(iii) *The training of community health officers.* This training takes place at the health post level and is provided by the male nurse in charge of the post, who is also responsible for supervising the activities of community health officers.

(iv) *The training of traditional birth attendants.* Traditional birth attendants receive their training in departmental maternity clinics run by certified midwives; it is of three to six months' duration (depending on the circumstances). Midwives constitute the ultimate supervisory authority of traditional birth attendants and provide them with valuable support.

(*b*) *Academic training*

The integration of primary health care into the curricula of the programmes offered by various schools and institutions training nursing and midwifery personnel has followed a pattern similar to that described for training at field level.

(i) *The training of instructors.* During 1979–80 some of the permanent teaching staff and curriculum managers participated in seminars and workshops related to primary health care at the national and regional (i.e., WHO African Region) level. Subsequently, they attended further seminars dealing more specifically with the integration of primary health care into the curriculum. The participation in seminars at the national and intercountry level is restricted and so, after each of these activities, those who have attended communicate their experience to colleagues who have not been present. These interschool study sessions facilitate the sharing of knowledge and experience.

(ii) *The training of student teachers.* The training of teachers for basic nursing and midwifery schools is undertaken at the Centre for Higher Nursing Studies. It was seen as essential to reorient the curriculum to prepare students for the tasks that they will have to undertake following graduation. This has been done with the support of the WHO Regional Office for Africa. The curriculum now focuses on primary health care; for instance, on the management of primary health care programmes at the different levels, on the training and supervision of various categories of workers, and on the evaluation of training programmes.

This new curriculum was introduced in the 1980–81 academic year and the first classes of graduates are now at work undertaking the supervision of primary health care in rural areas or teaching in basic training schools.

(iii) *Basic training.* The basic training curricula are in the process of being revised for all schools. In the meantime students are being provided with field experience in rural areas of two to four months'

duration, dependent on the individual school. As a result they are learning about local problems.

(c) Continuing training

This training is provided in the form of seminars or workshops and it is of one or two weeks' duration. It is provided in all parts of the country so as to be accessible to as many health staff as possible. Although it is intended for all those engaged in health care activities, particular stress is laid on certain categories, namely:

—teachers at nursing and midwifery schools;
—those in charge of health services or particular programmes at the regional and departmental levels;
—health post chiefs; and
—certain categories of staff working at the central level, such as administrators, health statisticians, managers, physicians, pharmacists and health economists.

Conclusion

The integration of primary health care into the training of various categories of health personnel is proceeding slowly but surely. It is too early to make an assessment of the effectiveness of the various programmes; their results will need to be evaluated at field level when they have been in operation for a longer period of time. Nevertheless, the outlook is a hopeful one.

Example 2 : Thailand

1. Background

The framework for a community-focused nursing curriculum was contained in the 1974 report of the WHO Expert Committee on Community Health Nursing, and this gave impetus to the assessment of existing curricula and to the search for methodologies for the design of new curricula that were people-oriented rather than institution- and disease-centred.

The Declaration of Alma-Ata led to the adoption of a national goal to improve the quality of life of all the population through expanded community development and extension of health service coverage. This acce[illegible] activities related to the role of health

workers in primary health care. One of the key issues dealt with was the appropriateness of the preparation of nurses to enable them to function in community health care.

A nurse member of a Change Agent Committee organized a workshop for nurse experts to identify the characteristics and competences that nurses require to meet the health care needs of communities within the context of the strategies to achieve the goal of health for all by the year 2000.

Subsequently, a series of local workshops and seminars was organized to reorient nurse leaders, from both education and service sectors. The topics covered by these workshops and seminars included:

—the thrust of primary health care nationally and internationally;
—country health problems within the socioeconomic context;
—national policies and the plan of action for the development of primary health care; and
—necessary changes in nursing education.

As an outcome of these activities, a committee was appointed to draft a curriculum for nursing education oriented towards community health.

The professional nursing organization was mobilized to provide support. As a result, in its formal meetings and in all bulletins, it promoted the need for the reorientation of nursing education and for curriculum change.

A national workshop was held, attended by representatives from government and nongovernment nursing schools and by nurses from the hospital and community services. The debate focused on the reasons for the restructuring of the existing nursing education system and how this should be done.

2. Programme change

Effective change began to take place when a nursing faculty that already offered post-basic B.Sc. and M.Sc. programmes for nurses decided it would like to establish a basic B.Sc. programme. A WHO short-term consultant collaborated in the development of a community-oriented curriculum for a basic nursing education programme. The process used was that described in the WHO draft guidelines for the reorientation of nursing curricula. The programme developed was submitted to the Nursing Committee of the

University and was accepted. This Committee includes departmental heads of universities and representatives of the Ministries of Health and Education, of legal bodies and of nurses.

The next step was taken when an established nursing faculty in another part of the country decided to review and change its curriculum. Faculty members were sent as observers to places where developments and the implementation of innovations and change were already under way. Orientation meetings were held to help to overcome the resistance of staff and students. The reorientation of the curriculum has now been completed and the first group of students will shortly be enrolled in the programme.

During this time a new faculty of nursing has been established and has made some further modifications in the curriculum.

A national workshop has taken place and a task force has been set up to design a national curriculum that is community health oriented and focused on primary health care. This curriculum will be the basis of all basic nursing curricula in the country.

Lines of communication have been established for the monitoring and reporting of progress as plans are developed, and as a means through which technical support can be obtained when problems are encountered.

The production of specific materials relating to nursing in primary health care is an ongoing activity.

Summary

In summary, the steps of the reorientation process could be outlined as follows:

1. Orientation of nurse leaders to a national policy of health systems based on primary health care.
2. Situation analysis of nursing education and services.
3. Determination of the changes required in the nursing education system and the reorganization of nursing services.
4. Selection of schools where innovations are to be implemented.
5. Monitoring and evaluating developments including the provision of technical support to schools requiring it.
6. Consensus reached on acceptable changes.
7. Setting up of a task force to design a reoriented curriculum for implementation in all schools in the country.

Annex 2

DEFINITIONS

1. Basic nursing education

An educational programme, leading to qualification as a nurse, which provides a broad foundation for both the practice of professional nursing and a post-basic education.

2. Degree programme in nursing

An educational programme in nursing that takes place in a university, technical college, or other institute of further or higher education. The programme may admit both students undertaking basic nursing education and qualified nurses prepared through non-degree programmes.

3. Post-basic education

An educational programme for nurses previously prepared in basic nursing designed to increase knowledge and skills in clinical nursing specialties (e.g., psychiatric nursing, maternal and child health nursing and in other aspects of nursing, such as administration and teaching). The education may take place in a university, an institute of higher education, or in any other relevant educational establishment, and the programme is continued from year to year and is recognized by an appropriate authority. Specific requirements are laid down for admission and full-time teaching staff are responsible for the education.

4. Continuing education

A structured learning process that follows initial training and continues throughout the career of the health worker; it is designed to assist health workers to maintain and improve their competence and to acquire new knowledge and skills. It may be organized within the formal education system or outside it but within programmes related to specific health service needs, or again it may be of an informal nature; it includes self-learning.

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